

Complainants witness Shewsbury Documentary  
Exhibit (of the title Page of the second volume of the  
German Handbuch [Arzneimittellehre] and of the  
first two paragraphs of the article contained there  
in in German, with a translation of the same,  
and of the rest of said Article as contained in Re-  
spondents witness Pfeiffer Exhibit).

David B. Coddington

Special Examiner.

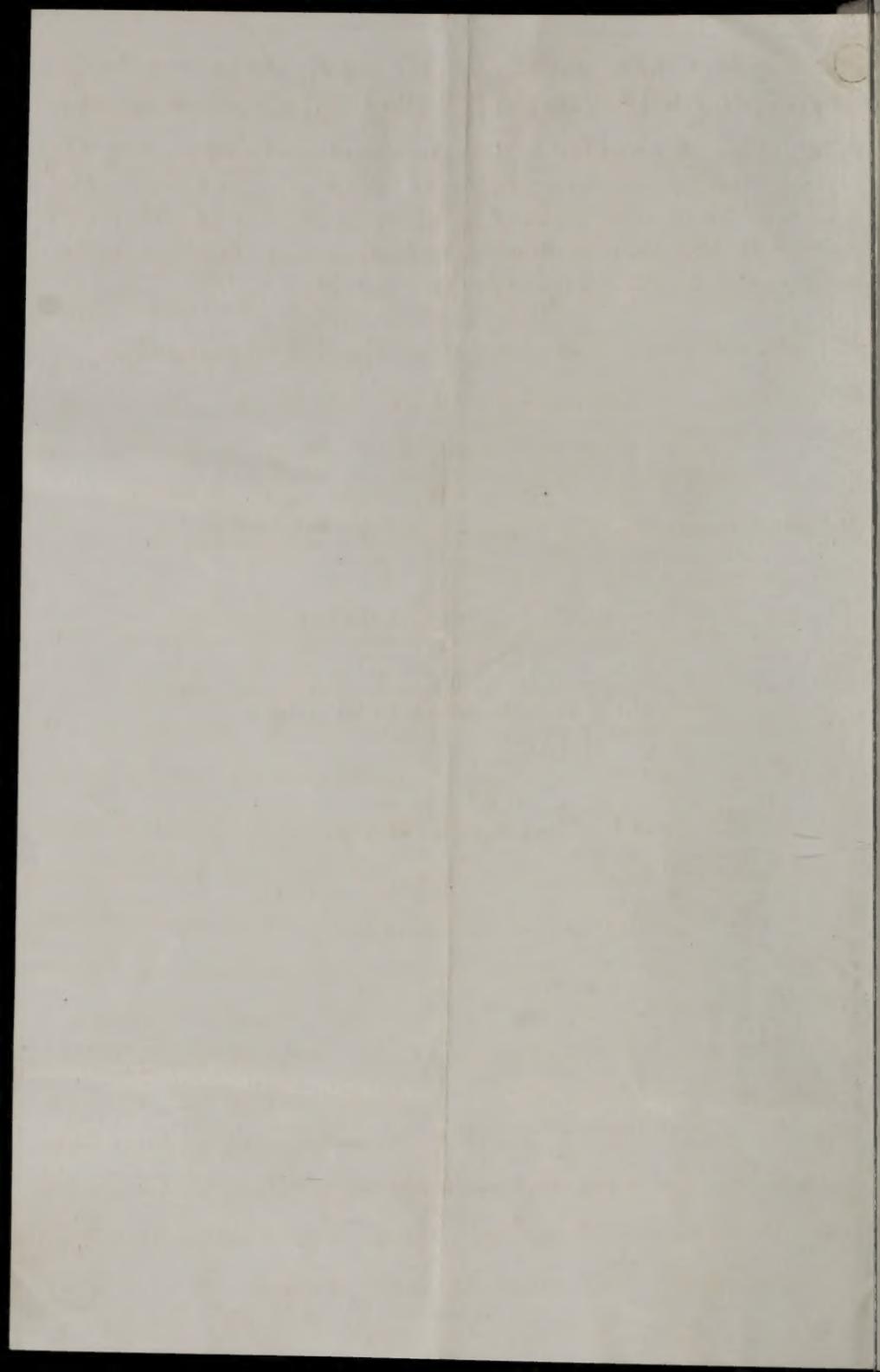
Handbuch  
der  
Gesammelten arzneimittellehre  
mit besonderer Rücksichtnahme  
auf die  
Pharmacopoe des Deutschen Reiches  
für  
ärzte und Studirende  
bearbeitet  
von  
Dr. med. Theodor Husemann  
Professor in Göttingen  
In zwei Bänden.

Erster Band

—

Berlin 1875—

Verlag von Julius Springer  
Morbijouplatz 3.



# Radix Saponarie; Seifenwurzel.

Die officinelle Seifenwurzel stammt von dem bei uns an Ufern und Hecken wachsenden Seifenkraut, *Saponaria officinalis* L., einer zu der Familie der Caryophyllaceae gehörenden Pflanze, welche in allen ihren Theilen, besonders aber in der Wurzel, ein durch seine Eigenschaft, mit Wasser eine schäumende Lösung zu geben, ausgezeichnetes Glykosid, das Saponin, einschliesst.

Die Seifenwurzel besteht gewöhnlich aus den jungen, cylindrischen, einfachen Pfahlwurzeln, welche entweder ganz und in Bündel zusammengebunden, oder zur Erleichterung des Trocknens der Länge nach gespalten und lose, im Handel vorkommen und sich leicht durch ihre schön braunrothe, längsrundl. mit äusserst kleinen Narben oder Wurzelfasern versehene Aussenfläche und ihren dichten, glatten Bruch charakterisieren. Auf der Bruchfläche ist die dünne, weisse homogene Rinde durch den bräunlichen Cambrerring von dem homogenen, citronengelben, im Centrum weissen und markartigen Holz geschieden. Die Wurzel ist ohne Geruch, schmeckt anfangs süßlich bitter, später

anhaltend scharf und kratzend und bewirkt Zusammenlaufen von Speichel im Munde, weshalb sie auch als Speichelwurzel bezeichnet wird. Statt der Pfahlwurzel kommen in Handel auch die Theile des gleich dicken und gleich gefärbten aber knotigen Wurzelstocks vor. Man unterscheidet die Seifenwurzel als *Radix Saponariae rubrae* von der als *Radix Saponariae albae* bezeichneten Wurzeltheilen von *Malandrium sylvestre* Röhl. und *M. pratense* Röhl. sowie von der Spanischen oder Levantischen Seifenwurzel, *Rad. Saph. Levanticae*, den  $\frac{1}{2}$ -2 Zoll dicken, fusslangen Wurzeln von *Gypsophila Struthium* L.

[For the rest of the foregoing article, in the original text, see p. —]

Hand-Book  
of the  
Whole Materia Medica,  
with especial regard to the  
Pharmacopœia of the German Empire,  
for  
Physicians and Students;

Edited by  
Theodore Kusenau, M.D.,  
Professor at Göttingen.

In two volumes.

Second Volume.

Berlin, 1875.

Printed by Julius Springer,  
Mühlen Platz, 3.

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Radix Saponaria - Soaproot.

The officinal comes from the soaproot, Saponaria officinalis (L.), growing on the banks and in the hedges near us. It is one of the plants of the order Caryophyllaceæ; of which all the parts, but more particularly the root, have the peculiarity of giving with water a frothing solution.

This arises from a contained Glycoside, Saponin. The Soaproot, as found in the market, consists usually of the young, cylindrical, simple tap roots; which are either whole and bound in bundles or, to facilitate the drying, split lengthwise and loose: and such are easily distin-



V  
quished by their beautiful brown red, length  
was wrinkled with very small scars, or root-  
fiber ~~marked~~, surface, and their close even  
fracture.

On the fractured surface, we can see the thin  
white homogeneous bark, separated by the  
brownish cambium ring from the homo-  
geneous citron-yellow; in the centre, white  
and pithy wood.

The root is without smell, tastes first sweetish  
bitter, but later continuously sharp and scraping;  
and produces salivation; whence it is also  
called spit-root.

Instead of the tap root, there are also found  
in commerce some of the like thick and like  
colored but gnarled root-stocks. We distinguish  
the soap roots, as radix saponaria rubra, from  
radix saponaria alba (which consists of the  
roots of Malandrium sylvestris Röhl and  
M. pratense Röhl), as well as from Spanish or  
Levant soap root (radix saponaria Levanticae—  
the  $1\frac{1}{2}$  - 2 in.<sup>thick</sup>, foot-long roots of the Sy-  
sophila Stratum, L.).

Saponin, which is found in a great num-  
ber of plants of the Caryophyllaceæ, as for ex-  
ample in the Corn Cockle (Agrostemma Githago); also  
in the Senega root, in the Monezia and in the  
so called Panama bark, has the formula  
 $C_{32} H_{50} O_{18}$ : and is a white amorphous neutral



powder; which has at first a sweetish and afterwards a persistent sharp and scratching taste, and when placed on the membrane of the nose gives rise to violent sneezing. It dissolves with difficulty in cold spirits of wine, not at all in ether, easily in water. The aqueous solution, containing only the  $\frac{1}{1000}$  part, still foams, on shaking, like soap water.

On standing exposed to the air, white flocks are precipitated, and it disengages carbonic acid gas. Dilute acids split saponin into saponin and glucose. By treating for a shorter time, intermediate products are produced. (Rochester).

Soap root is not used according to the physiological action of the saponin; on the contrary its use, like that of sarsaparilla, is purely empirical.

Saponin acts sharply as a local irritant: and moreover paralyzes the various parts of the nervous system and muscles. It varies in the intensity of its poisonous action, according to the source from which it is derived. That from the corn-cockle is stronger than that from the Panama bark; the latter is stronger than the glucoside from the senna root (Pelikan).



In man, doses of from 1 to 2 drachms, cause a tendency to cough and a secretion of mucus, for several hours. (Schnoff.) Upon wounds or mucous membranes, it causes sharp pains; and, after some hours, a plectic exudation.

The observations of Leikau on the various kinds of saponin are of interest; showing the benumbing influence upon the spot of application, combined with the diminution of the electric irritability of the nerves and muscles.

Ligation of the vessels and cutting the nerves relate this local anæsthesia.

Unfortunately the inflammatory action of the saponin on the place of application does not permit its therapeutical use in man.

Saponin, taken up in the blood, has a paralyzing action on the muscles and nerves; and affects in a peculiar manner the nerves of the heart, <sup>not only</sup> paralyzing the terminations of the vagus and the inhibitory centres, but also the nerves of acceleration originating from the sympathetic; and finally causes the heart to stand still.

Digitalin causes, in cases of poisoning by saponin, acceleration of the strongly retarded action of the heart, and strengthens the systole of the same; at the same time, it removes the lessening of the blood pressure which is such a striking characteristic of the



action of saponin.

Before paralysis of the heart takes place, the muscular coats of the intestines are also paralyzed.

Further, saponin works quickly upon the vasomotor centre; to specialize, exciting at first, and then quickly paralyzing; also upon the centre of respiration; which is paralyzed suddenly by large doses, and gradually by small.

Frequency of respiration and temperature fall considerably, in poisoning by saponin.

Tonic and tonic spasms observed in such cases seemed to be caused by disturbances of the functions of the heart and respiration.

Yet the application of saponin to the spinal cord of the frog creates, at first, tetanus; afterwards paralysis, passing from the centre towards the periphery. The state of the pupil is inconstant; but, after large doses of saponin, it invariably appears inert and disinclined to dilate.

In the intestines and stomach, saponin produces inflammatory redness. Ptyalism and an increase of other secretions are not produced by it.

These physiological effects, shown by experiments made by H. Köhler, seem to point to the employment of saponin as an



antipyretic, but ~~this~~ far it has not been used as such.

Dr Ange says he used it with success in uterine hemorrhages, in doses of 0.15 grammes.

Radix saponaria is mostly used in connection with other vegetable antidiaphoratics, inwardly, in decoctions of 1 to 10 or 1 to 20, in doses of 10 to 15 grammes per day; and is generally ordered in the form of the root.

Formerly it was also used as an ingredient in Kämpff's visceral injections.



# Circuit Court of the United States,

District of Mass., May Term, 1878

## IN EQUITY.

Horace L. Bowker Complainant  
Gustavus D. Dowd Defendant

## DECREE

FOR PERPETUAL INJUNCTION AND FOR REFERENCE TO A MASTER.

This cause came on to be heard at this Term,  
May 24, 1878, upon the pleadings and proofs, and was argued by counsel for the respective parties:

And now

upon consideration thereof, to wit: Oct. 19, 1878, It is ORDERED, ADJUDGED AND DECREED, as follows, viz., that the Letters Patent referred to in the complainant's bill, being Letters Patent of the United States, granted unto Horace L. Bowker of Norton Massachusetts for Improvement in Spouts and Muzzall Walers numbered 193,476 and dated July 24, 1877 is a good and valid patent; and that the said Horace L. Bowker was the original and first inventor of the improvement described and claimed therein; and that the said defendant has infringed the said patent, and upon the exclusive rights of the complainant under the same.

And it is further ORDERED, ADJUDGED AND DECREED, that the complainant recover of the defendant the profits which he has received or made, or which have accrued to him from said infringement by the manufacture, use or sale of the improvement described, and secured by said Letters Patent at any and all times since the said July 24, 1877

and, in addition thereto, the damages which the complainant has sustained thereby.

And it is further ORDERED, ADJUDGED AND DECREED that it be referred to Henry L. Hallatt Equin a master of this Court, to take and report to the Court an account of the profits which the said defendant has received, or which have arisen or accrued to him from the infringement of the patented invention by unlawfully making, using or vending the same as alleged in the bill, and to ascertain and report the damages, if any, in addition to the profits, which the complainant has sustained thereby since the 24<sup>th</sup> day of July A.D. 1878.

And it is further ORDERED, ADJUDGED AND DECREED, that a perpetual injunction be issued against the defendant according to the prayer of the bill.

And it is further ORDERED, ADJUDGED AND DECREED, that the complainant recover of the defendant his costs of suit.

By the Court,

John. S. Lyon Clerk.

Grace L. Barker

Galveston, Tex

Received  
Oct 19, 1881

United States Circuit Court,  
District of Massachusetts.

Horace L. Fowler, vs. Gustavus D. Dows } In Equity.

Whereas, in the above entitled cause, an interlocutory decree was entered on the ninth day of October, 1878, whereby it was ordered, adjudged and decreed, among other things, that it be referred to a master of this Court to take and report to the Court an account of the profits which the said defendant has received, or which have arisen or accrued to him, from the infringement of the patented invention, by unlawfully making, using or vending the same, as alleged in the bill, and to ascertain and report the damages, if any, in addition to the profits, which the plaintiff has sustained thereby, since the twenty-fourth day of July, 1877:—

Now, therefore, it is hereby stipulated and agreed as follows, to wit:

That, to sever "the necessity of taking said account and ascertaining and reporting as aforesaid, the defendant

110. Disposition.

Barker  
Dr.   
Dr.   
Dr.



Trade of Bauer

Wittman of Detmold

Wittman of Goslar

Wittman of Goslar

for the first time

mention of the amount in the same

as a first and sufficient letter.

should be used such a letter

as the subject of the first

letter for the sum, addressed

only that a full description

of the letter, the subject con-

cerning which is to be left

fully ascertained and shown

in the first instance to the

A.D. 1809. — — — — № 3232

Soda & other Mineral Waters, Liqueurs, &c.

Hamilton's Specification

To all to whom these presents shall come, I, William <sup>Frances</sup> Hamilton, of Lower Mount Street, in the City of Dublin, <sup>Gentleman</sup>, do send greeting.—

Whereas his most Excellent Majesty King George the Third by His Letters Patent under the Great Seal of the United Kingdom of Great Britain and Ireland, bearing date at Westminster, the fourth day of May <sup>now</sup> last past, did give and grant unto me, the said William <sup>Frances</sup> Hamilton, my executors, <sup>His special licence, full power, sole privilege and authority, under the said letters patent, to make, manufacture, my executors, administrators and assigns,</sup> administrators, and assigns, should and lawfully might make, use, exercise and vend, within England, Wales, and Town of Berwick-upon-Tweed, my Invention of "A New Mode of Preparing Soda and other Mineral Waters, Spirituous, Acetous, Saccharine, and Aromatic Liqueurs, and sundry Improvements Relative thereto;" In which said Letters Patent there is contained

a proviso, obliging me, the said William  
Frances Hamilton, under my hand  
and seal, to cause a particular descrip-  
tion of the nature of my said In-  
vention, and in what manner the same  
is to be performed, to be enrolled in His  
Majestys High Court of Chancery within  
six calender months next and imme-  
diately after the date of the said in part  
recited Letters Patent, as in and by the  
same, relation be therewith had, may  
more fully and at large appear.

Now know ye, that in compliance with  
the said proviso, I, the said William  
Frances Hamilton, do hereby declare  
that my said Invention is fully de-  
scribed and ascertained in manner  
following, that is to say &  
I use various solutions of alkalies,  
salts &c, and combinations of ardent  
spirits, vegetable acids, aromatic  
oils, sugars, milk, mucilage &c, for

saturation and supersaturation, with carbonic acid. I obtain my gas from the decomposition of whiting with dilute sulphuric acid, applying the whiting in a liqued state, to admit of its introduction to the laboratory, in which the carbonic acid is disengaged with facility and clearness; the gypseous residuum I let off also liqued. I expose the solution &c; in a strong well-tempered copper vessel, under more or less pressure, for the absorption of fixed air, which may be effected (by its suffering considerable agitation in a cold bath suspended by pendulous tubes) without interruption to the injection of solution &c. from a condensing syringe or discharge of aerated liquor from a decanting stopcock, so that the bottling can exist continually. I use a piston soled and cylindrical, fitted with a thin collar of leathers, at the lower extremity

of the pump; it forces upwards causing the proportionate supply of liquid Mota which is injected by it at the same time with the carbonic acid, to ~~serve~~ serve as a lute to the collar of leather already nearly air tight. This principle of liquid luting I apply in every possible instance. The valves I sometimes place in the plugs of the acting stop-cock so that if they get out of order they can be easily ground air tight again by withdrawing the plugs, in which case the charge may <sup>still</sup> be preserved in the vessel by means of another sett of stop-cocks, placed nearer to it and used only on such occasions, or when it is necessary to anoint the acting ones with a composition of oleaginous wax, tall oil &c. I generally use a glass or earthen bottle or jar of a long ~~and~~ <sup>and</sup> oval form, for several reasons <sup>viz</sup> not having a square bottom to stand

upon, it can only lie on its side, of course, no leakage of air can take place, the liquid <sup>matter</sup> being always in contact with the stopper. It permits its contents to be found out more easily, and consequently with less loss of fixed air. It can be much stronger than a bottle or jar of equal weight made in the usual form, and is therefore better adapted for packing, carriage, &c. The neck of the bottle <sup>and mouth</sup> are sometimes so formed that it may serve instead of a drinking glass if necessary. I commonly stop with cork, which, from the excessive pressure, generally existing within the bottle, flies out on the retaining strings being cut; but sometimes I use glass or earthen stoppers, fitted conically in the usual way, or ground in across the neck. I also occasionally use stoppers of various lignous matter, closing the pores

with coatings of insoluble compound.  
I generally saturate under a pressure  
of 120 lbs. per square inch, which is  
somewhat reduced on the liquors  
being bottled. The decantation is  
effected by stopping the mouth of the  
bottle or jar with a perforated flat  
cork, leather, &c., through which passes  
the decanting tube, so that on opening  
the ~~the~~ cock the aerated liquor rushes  
into the bottle or jar, till resisted by  
the condensation of the atmospheric  
air it originally contained, and a  
portion of carbonic acid gas extricated  
during the effort. The decantation  
is continued by sufficing this condens-  
ed air to escape, and when full the  
bottle or jar may be withdrawn and  
stopped ~~easily~~ with ease by letting off  
slowly a small portion of the fixed  
air contained before its removal.  
sometimes I construct the decanting cock

so as to allow the stopper to pass  
into the bottle a jar previous to its  
removal from the flat air-tight fitting,  
by which means the entire pressure, how  
great soever, may be altogether retained.

In witness whereof, I, the said William  
Francis Hamilton, have hereunto set my  
hand and seal, this twenty eighth day of  
October, one thousand eight hundred and nine.

W. F. Hamilton (L.S.)

And be it remembered, that on the twenty  
eighth day of October, in the <sup>fifth</sup> year of the reign  
of His Majesty King George the Third, the said  
William Francis Hamilton came before our  
said Lord the King in His Chancery in  
Ireland, and acknowledged the instrument  
aforesaid, and all and ~~anything~~ therein contained  
and specified, in form above written. And also  
the instrument aforesaid was stamped according  
to the time of the stopper made on the forty  
eighth year of His said Majesty's reign -  
marked the second day of November, one  
thousand eight hundred and nine.

Respondents documentary exhibit Hamillow  
Patent No 1. Dated 1869 Special Examiner.

Case No 3292  
D 28, 1869.

W. H. Hamillow

Specification

for

Letter Patent

Supreme Court of the United States,  
3rd. of Decr.

No 919 Equity

Grace L. Bowles Gaston & Dowd.

## Critique Complément.

Entry	400
Service of Subp <sup>a</sup>	262
Hand 3 Miles & 2 Twp 5x33 = 165	
Atc                    do                    do 5x33 = 165	
May 1, 1878 Tr. 33 Atc 330 <u>3.63</u>	6.93
3 Cchimanaas	<u>6.60</u>
Paid Clerk Sheriff Recd 180ffc 18	32.40
Clark per disordem of Cause	
Pelting, 3.00 D.L. & C.R. 3.30 Cm & R. 90 {	29.20
Greene 1.00 G.F. 3.00 Rec 9.00 }	
Attorney fee in cause	25.
on 13 depositions @ 2.50	<u>32.50</u>
	<u>52.50</u>
Add witness fees - 1.50 per each day's Atc	<sup>119.25</sup> <u>119.25</u>
5cts each way per m. hand	
" Examiner fees - but actually paid Examiner	
" Pelting Recd but actually paid	
" and paid attorney for necessary copies	
" injunctive	<u>1.00</u>
Total costs	

Bowker N.Y.  
2  
Dover

Carlo for  
Complex

# BOWKER'S GUM.

This liquid gum is entirely a new, original and wonderful preparation. Nothing like it has ever before been offered to the public. It works like magic in all liquid preparations where it is desirable to have a sparkling, frothy foam, or "head," as it is called, especially for soda and mineral waters. Where soda or ginger ale is drawn, it fills the glass with a beautiful cream-like foam, which remains for a long time. It is excellent in small beer, for champagne cider, and in all preparations where carbonic acid gas exists, either fermented or charged. Dead ale or Lager Beer that is to be pumped or agitated is greatly improved by using this gum. One or two ounces added to any kind of syrup, for soda fountain use, makes it draw light, frothy and beautiful. In all cases where it is used it will save more than one hundred times its cost by increasing the bulk of the liquid drawn, to say nothing of its greatly improved appearance.

**DIRECTIONS**—For use in bottling ginger ale, mineral waters, beer of all kinds that are charged, where syrups are used, mix thoroughly one or two ounces of the gum to every gallon of syrup, according to the amount of foam you wish. For Soda Fountain use—one ounce to a gallon of syrup is sufficient. For beer that is to be fermented use one or two ounces of gum to every 6 pounds of sugar used in making the beer, or two ounces to every gallon of molasses. For champagne cider use 10 ounces of the gum to 40 gallons of cider; the same for dead ale or lager beer.

## CAUTION.

In order to protect ourselves and customers all labels will have this, our autograph signature.

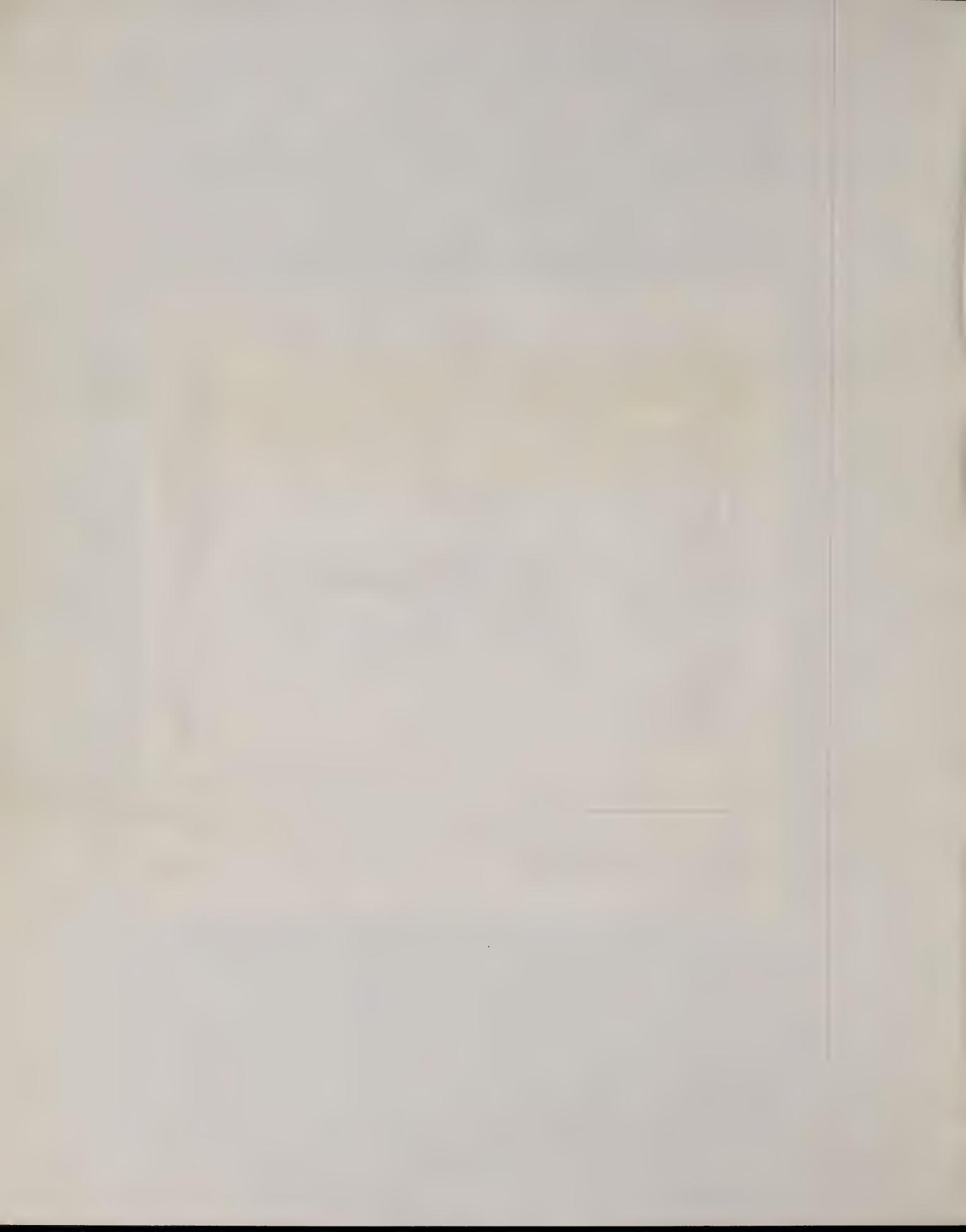


MANUFACTURED IN THIS COUNTRY ONLY BY

**DR. H. L. BOWKER & CO.,**  
**132 MILK STREET, BOSTON.**

Patented in the United States Sept. 12th, 1871, and July 24th, 1877, and in the Dominion of Canada, Aug. 15th, 1877.

*"Convenience, virtues, cleavage  
Fluid B" Daniel H. Bowker,  
Specie Scumie.*

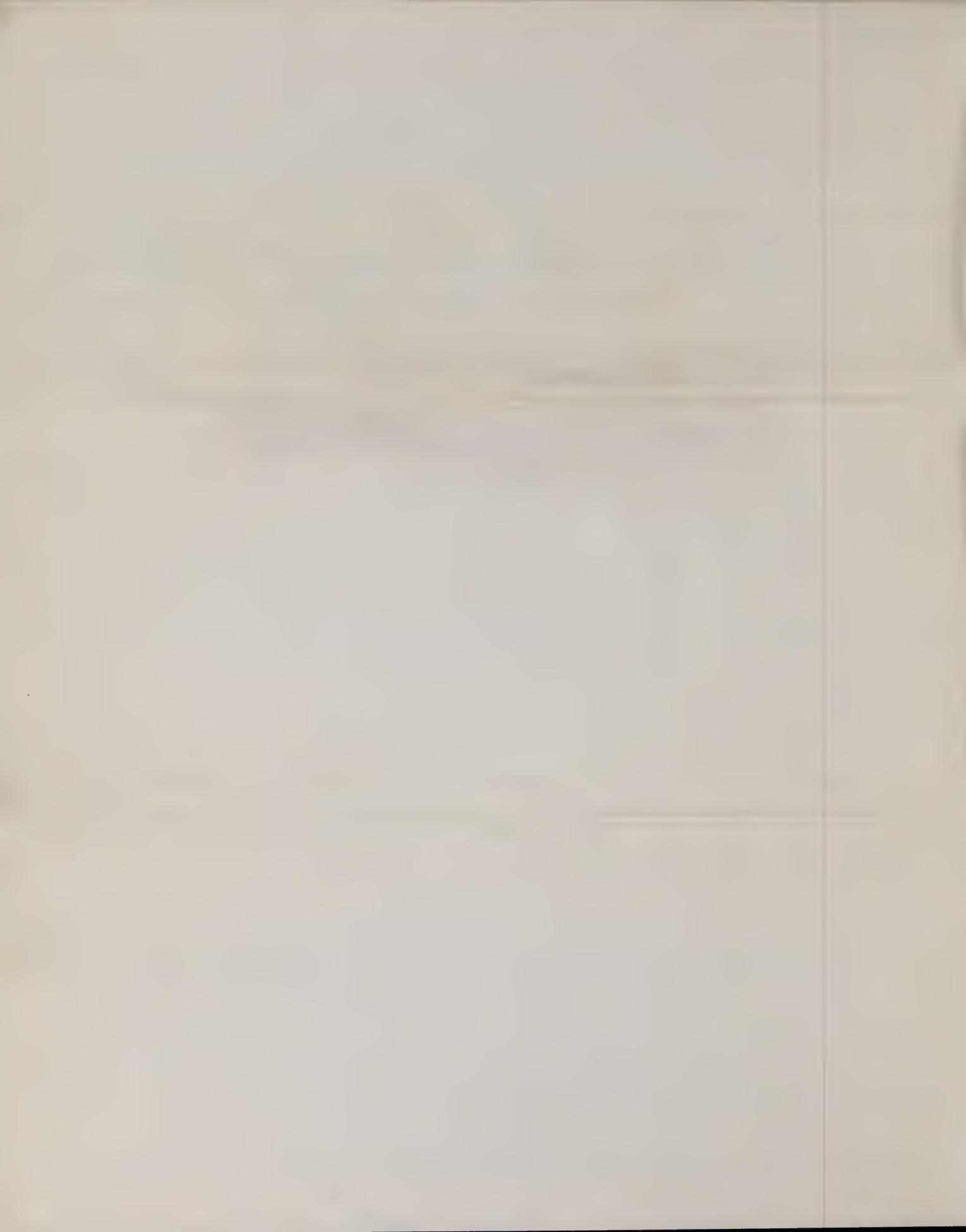


Complainants Exhibit - Hathaway  
David B. Bowling, Special Examiner.

*Office of Vincent, Hathaway & Co., 109, 111, & 113 Broad Street, {*  
BOSTON, June 7, 1876.

We are now using Dr. Bowker's Gum, and wish to say that the same is superior to any-  
thing of the kind which has come to our notice.

Vincent & Hathaway & Co



Office of Moses Fairbanks & Co., Howard Street, }  
BOSTON, June 8, 1876.

DR. H. L. BOWKER & Co.

Gentlemen:—We are using large quantities of your liquid Gum in our soda and mineral water preparations. For creating a sparkling, frothy foam and body we think it is superior to anything that has ever been in use. Respectfully yours,

Moses Fairbanks & Co.

Respondent, Luther Heale & Hubit,  
Lana H. Colledge,  
Special Examiner.



~~H 32 H 54 O<sub>18</sub> compound~~ 2

~~32 Equivalent of Carbon~~

~~54 " " of Hydrogen~~

~~18 " " Oxygen~~

~~44~~

Das Saponin, welches sich noch in einer größeren Anzahl von Angehörigen der Familie der Paracanthaceen z. B. in der Koriwade, Pyrostemma <sup>Pyrostemma</sup> Gilkg. u. a. s. d. m. in der Senegaliaezyal in der Monesca und in der sog. Panama-rinde findet, hat die Formel  $C_{32}H_{54}O_{18}$  und bildet ein weißes, anorphes, neutrales <sup>Kalium</sup> Silber, welches von anfangs süßlichem, hinterher anhaltend schärfem und kratzendem Geschmacke ist und auf die Mundschleimhaut gebracht, zu beständigem <sup>Kalium</sup> Neien reizt. Es löst sich schwierig in <sup>Kalium</sup> Alkohol, leicht in Wasser. Die wässrige Lösung schäumt erheblich bei  $\frac{1}{1000}$  Teelbst. beim Schütteln mit <sup>Kalium</sup> Sulfatwasser; beim Schütteln an das

Luft scheidet sie unter  
Kohleusäureentwicklung weiße  
Flocken ab. Verdünnte Säuren  
spalten Saponin in Saponigenin  
und Glykose; bei nicht lange genug  
fortgesetztem Kochen entstehen  
auch intermediane Spaltungs-  
produkte (Kochleder).

Eine aus der physiologischen  
Wirkung des Saponins sich  
ergebende Anwendung der  
Geissencoupe findet nicht statt,  
während diese bei weise  
empirisch nach Hart de Gascoigne  
gebraucht.

Das Saponin ist die östliche Schärfe  
und außerdem auf die verschiedensten  
Teile des Nervensystems und  
die Muskulatur tätigen und wirkendes  
Stoff, welcher in der Intensität

einer giftigen Wirkung nach, aber zu seiner Darstellung benutzten Material verschieden ist; das aus Körneraden dargestellte wirkt stärker als aus der Panamaviole gewonnene letzteres kräftiger als das Glykoid aus der Senegacouznel (Pelikan). Bei Menschen bedingt Saponin in der Dosis von 1 bis 2 Dgn.

Hustenreiz und mehrstündige Absonderungen von schleimig-schleimig auf Wunden oder Schleimhäuten lebhaften Charakter und nach einigen Stunden Absonderung plastischen Charakters. Interessant ist die bei verschiedenen Arten Saponin von Pelikan constatirte erhebende Wirkung auf die Sensibilität an der Applicationsstelle, gleichzeitig mit Verminderung der electricen Reizbarkeit.

der Nerven und der Muskeln,  
Spatium der Gefäße und  
Knochen, indem der Nerven  
wirken auf das Zustandekom-  
men dieser Lokalen Parästhesie ver-  
langsamend eie.

Leider lässt die entzündliche  
Reaktion des Saponins an der  
Applikationsstelle eie  
Therapeutische Verwendung  
bei Menschen nicht zu.

Das in das Blut aufgenommene  
Saponin wirkt lähmend auf  
Muskeln und Nerven und afficirt  
in eigentlicher Weise die  
Herznerven, indem es sowohl  
die Vagusendigungen und die  
Stimulationscentren als die  
aus dem Sympathicus stammende  
Beschleunigungsnerven lähmt  
und schliefslich Herzstillstand

bedingt,

Digitalin bedingt bei Saponinvergiftung Erbschlaunigung der stark retardirten Herzaction und Verstärkung der Herzkontraktionen, ebenso beschleunigt es das bei Saponin hervorgerufene Sinken des Blutdrucks. Vor Eintritt der Herzlähmung wird auch die Darmmusculatur gelähmt, ferner wirkt Saponin rasch auf das vasomotorische Centrum und zwar zuerst erregend und dann. rasch schwächer, so wie auf das respiratorische Centrum, das von inneren Fasern plötzlich von einem allmählich gestalteten wird. (Therapie) Frequenz und Temperatur sinken bei Saponinvergiftung sehr bedeutend. Phönische und tonische Krämpfe, welche nach Saponin vorkommen,

scheinen auf die Störungen des  
 Herzens und der im Athem-  
 funktionen bezogen werden  
 zu müssen; doch erzeugt  
 Saponinlösung des Rückenmarks  
 bei Fröschen anfänglich Tetanus,  
 später vom Cervix nach  
 der Peripherie zu fortschreitende  
 Lähmung. Das Verhalten  
 der Pupille ist unconstant,  
 dagegen findet sich stets nach  
 grossen Dosen Saponin Trägheit  
 und Lust zu Bewegungen.  
 Im Darm und Magen bewirkt  
 Saponin entzündliche Reaktion;  
 Speichelblässe und Verminderung  
 anderer Secretionen ruft es nicht  
 hervor. Diese aus Untersuch-  
 ungen von H. Köhler sich erge-  
 benden physiologischen Wirk-  
 ungen lassen das Saponin  
 als ein Antipyreticum an-

wundbar erscheinen, doch ist es in dieser Richtung bisher nicht benutzt. F. Anze will es zu 15 Cgm pro dosi mit Erfolg bei Mutterbildung gegeben haben.

Die *Stachys Saponariae* findet meist in Verbindung mit andern vegetabilischen *Entoclescratia* immerlich ein Decoct (1:10-20, zu 10-15 Cm pro die). Zuwendung und wird zweckmässig in Specieform verordnet. Früher kann sie auch häufig als Bestandtheil der Rämpfischen Visceralalkyostiere in Gebrauch

Resplendently variegated Puffin Gull  
Dunlin. Curlew  
She was & amain

Complainants, Cheney, Sharples, documentary, Exhibit No. 2.  
Danforth College Special Examiner.

CHENEY & MYRICK,

Wholesale Dealers in, and Exporters of American Drugs.

JOBBERS IN DRUGS, CHEMICALS, ESSENTIAL OILS, &c.

Manufacturers of Fluid Extracts, Eclectic and Pharmaceutical Preparations.

NO. 15 UNION STREET,  
BOSTON.

PRICES SUBJECT TO FLUCTUATIONS.

	Press'd.	Pow'd.		Press'd.	Pow'd.		Press'd.	Pow'd.
Abscess Root.	100		Butter Cup.	50		Elder Bark.	25	
Aconite Leaves.	25		Butternut Bark.	15	20	“ Berries.	50	
“ Root.	22	30	Cancer Root.	25		“ Flowers.	25	
Agrimony.	20		Canella.	20	25	“ Root, Dwarf.	25	
Alder Bark, Black.	20	25	Canker Weed.	25		Elecampane Root.	20	25
“ “ Red.	15	26	Caraway Seed.	17	25	“ Ground.	20	
Althea, Cut.	30		Cardinal Flowers.	30		Elm Bark, Slippery, Extra.		
Alum Root.	22		Cardus, Spotted.	25		“ “ Ground.	20	
Angelica Leaves.	18		Carrot Seed, (Wild).	25		Fennel Seed.	20	
“ Root.	25		Cascarilla.	15	20	Fern, Male.	25	
“ Seed.	25		Catnip.	18		“ Sweet.	20	
Angustura Bark.	35		Cayenne, Af. Pure.		50	Feverbush.	25	
Apple Tree Bark.	20		Celandine, Garden.	25		Feverfew.	38	
Arnica Flowers.	25		“ Wild.	18		Fireweed.	25	
“ Root.	30		Centaury, Red.	25		Fit Root.	45	
Ash Bark, Mountain.	20		Chamomile Flowers.			Fivefinger.	25	
“ Prickly.	20	25	“ Low.	100		Fleabane.	20	
“ White.	25		Chokeberry Leaves.	20		Foxglove.	22	25
Ash Berries, Prickly.	35		Cherries, (Dried).	50		Frostwort.	25	
A-ja agus Root.	50		Cherry Bark, (Wild).	12	16	Garget Berries.	25	
Avens Root.	20	35	Chestnut Bark.	25		“ Root.	18	25
Balm Gilead Buds.	40		“ Leaves.	25		Gelsemium.	25	
“ Lemon.	25		Chickory Herb.	18		Gentian Root.	15	18
“ Sweet.	25		Chickweed.	25		Ginseng Root.		
Balmomy.	20	25	Cocely, Sweet.	75		Golden Rod.	20	
Balsam, Sweet.	20		Cicuta Leaves.	20	80	Goldenseal Root.	25	
Barberry Bark.	25	30	“ Seeds.	50		Goldthread.	50	
Basil, Sweet.	25		Clary.	30		Gravel Plant.	25	
Basswood Bark.	20		Cleavers.	22				
Bayberry Bark.	12	15	Clover Heads, Red.	25		Hackmetack Bark.	18	
“ Leaves.	25		“ “ White.	30		Hair Cap Moss.	22	
Beech Bark.	20		Cocash Root.	60		Hardhack.	20	
“ Drops.	25		Cohosh, Black Root.	15	18	Heal-all.	18	
“ Leaves.	20		“ Blue.	18	25	Heart’s-ease.	18	
Belladonna Leaves.	35	40	“ Red.	25	80	Hellebore Root, Black.	25	33
Bellwort.	50		“ White.	25	28	“ “ White.	22	28
Beth Root.	25	30	Coldwater Root.	50		Hemlock Bark.	12	15
Betony Weed.	50		Colombo.	20	25	“ Leaves.	20	
Birch Bark, Black.	15	20	Coltsfoot Leaves.	20		Henbane Leaves.	30	35
Bitter Root.	30	35	“ Root.	40		Hollyhock Flowers.	60	
Bittersweet Bark.	35	40	Coolwort.	50		Hops.	25	
“ Tw. gs.	20		Comfrey Root.	20	25	Horehound.	20	
Black Root.	25	30	Cotton Root Bark.	30	35	Horsemint.	20	
Blackberry Bark, (of Root).	20	25	Cow Parsnip Root.	75		Horseradish Leaves.	20	
Blood Root.	18	20	“ Seed.	75		“ Root.	30	
Blue Flag Root.	25	30	Cramp Bark.	20	25	House Leek.	50	
Boneset.	18	20	Cranesbill Root.	20	22	Hydrangea.	25	
Borage.	30		Crawley Root.	100	110	Hyssop.	20	
Boxwood Bark.	20	25	Cuckold.	25		Iceland Moss.	17	
“ Flowers.	25		Culver’s Root.	25	28	Indian Hemp, Black.	30	35
Brooklime.	40		Daisy Flowers.	25		“ “ White.	22	30
Broom Herb.	30		Dandelion Herb.	20		Indian Physic.	20	
Buckbean.	26		“ Root.	20	22	Indian Turnip.	25	28
Buckhorn Brake Root.	25		Dittany.	25		Indigo Root, Wild.	20	28
Buckthorn Berries.	75		Dock Root, Yellow.	20	25	Ivy, Am. Bark.	30	
Bugle, Bitter.	20		Dog Grass.	25		Ivy, Ground.	20	
“ Sweet.	20		Dragon Root.	25	28			
Burdock Leaves.	18		Dulse.	15				
“ Root.	20							
“ Seed.	18							

CHENEY & MYRICK, Wholesale Druggists, 15 Union Street, Boston.

	Press'd.	Pow'd.		Press'd.	Pow'd.		Press'd.	Pow'd.
Jacob's Ladder.....	25		Pleurisy Root.....	25	30	Thorn Apple Leaves.....	20	25
Johnswort.....	20		Poke Berries.....	25		" " Seed.....	20	
Juniper Berries.....	12		Poke Root.....	18	22	Thyme.....	30	35
Knot Grass.....	25		Polypody.....	30		Tilia Flowers.....	100	
Kousso.....			" Root.....	40		Tormentilla Root.....	50	
Labrador Tea.....	25		Pomegranate Peel.....	30	50	Turkey Corn.....	25	30
Ladies' Slipper.....	25	30	Poplar Bark.....	12	15	Unicorn Root.....	25	30
Larkspur Herb.....	40		Poppy Flowers.....	100		Uva Ursi.....	15	20
" Seed.....	200		" Heads.....	50		Valerian, Am.....	25	30
Laurel Leaves.....	25	30	" Leaves.....	50		" Root, Eng.....	25	30
Lavender Flowers.....	22		Princes' Pine.....	20	25	Vervain, Blue.....	20	
Lettuce, Garden.....	22		Ptelia Bark.....	40	50	Violet, Blue.....	40	
" Wild.....	25		Pumpkin Seeds.....	18		Virgin's Bower.....	35	
Life Everlasting.....	18		Quassia.....	15		Wahoo Bark.....	35	40
Life Root.....	25	30	Queen of Meadow, Herb.....	20		Walnut Bark.....	25	
Lily Root, White.....	20	25	" " Root.....	20	25	" Leaves.....	25	
" Yellow.....	20	25	Queen's Root.....	25	30	Water Cup.....	25	
Liverwort Noble.....	30		Quince Seed.....	100		Water Melon Seeds.....	25	
Lebelia.....	25	30	Raspberry Leaves.....	18		Water Pepper.....	18	
" Seed.....	40	50	Rhatany Root.....	40		Whitewood Bark.....	20	25
Lovage Leaves.....	25		Rhubarb, Am.....	50	60	Whortleberries.....	50	
" Root.....	40		Rockbrake.....	30		Wickup Root.....	50	60
Lungwort.....	30		" Root.....	40		Wild Turnip.....	25	28
Lupuline.....	100		Roman Wormwood.....	20		Wild Yam.....	25	30
Maiden Hair.....	20		Rose Flowers, Red.....	75		Willow Bark.....	25	
Mallow, Low.....	20		" White.....	150		" " Pussy.....	25	30
" Marsh.....	20		Rosemary Leaves.....	20		Wintergreen.....	20	
" " Root.....	25	30	Rose Willow Bark.....	25		Witch Hazel Bark.....	18	22
Man Root.....	25	30	Rosin Weed.....	30		Wormseed.....	20	
Mandrake Root.....	16	18	Rue Herb.....	30		Wormwood.....	20	
Maple Bark, Red.....	22		Saffron.....	50		Yarrow.....	20	
Marjoram, Sweet.....	30	36	Sage.....	20		Yellow Jessamine.....	25	30
Marsh Rosemary Root.....	25	30	" Ground.....	25		" Parilla.....	20	25
Marygold Flowers.....	75		" Willow, Bark Root.....	50		" Root.....	25	
Masterwort Root.....	75		" " Herb.....	50				
" Seed.....	75		Sanicle Root, Black.....	100				
Matico Leaves.....			Sarsaparilla Root, Am.....	20	25			
Mayweed.....	18		Sassafras Bark.....	15	18			
Meadow Fern Burrs.....	60		" Pith.....	100				
" " Leaves.....	25		Savin.....	20	25			
Mezereon Bark.....	50		Scabious, Sweet.....	20				
Milkweed Root.....	25	30	Scabish.....	20				
Moccasin Root.....	25	30	Serofula Plant.....	50				
Moosewood Bark.....	20		Scullcap.....	25	30			
Motherwort.....	20		Senega Root.....					
Mountain Dittany.....	25		Senna, Am.....	18				
" Mint.....	25		Side Saddle Plant.....	25				
Mouse Ear.....	20		" Root.....	50				
Mugwort.....	20		Skunk Cabbage Root.....	25	30			
Mullein Leaves.....	20		Snakehead.....	20	25			
Mustard Seed, Black.....	18		Snake Root, Canada.....	40				
" " White.....	15		" " Virginia.....	35	40			
Nannybush Bark.....	25		Soaptree Bark.....	30				
Nerve Root.....	25	30	Soapwort.....	25				
Nettle Herb.....	25		Solomon Seal Root.....	25	30			
" Root.....	25		Sorrel Leaves.....	25				
Oak Bark, Black.....	20	30	Southernwood.....	35				
" Red.....	20	30	Spearmint.....	20	25			
" White.....	12	18	Spikenard Root.....	20	25			
Oak Jerusalem.....	25		Squaw Vine.....	25				
" " Seed.....	20		Stillingia Root.....	25	30			
Orange Peel.....			Stone Root.....	20	25			
Osier Bark, Green.....	20		Stramonium Leaves.....	20	25			
Pareira Brava.....			" Seed.....	20				
Parilla, Yellow Root.....	20	25	Strawberry Leaves.....	25				
Parsley Leaves.....	20		Succory Herb.....	18				
" Root.....	30		" Root.....	22				
Partridgeberry Vine.....	25		Sumach Bark.....	18				
Peach Bark.....	20		" Berries.....	18				
" Leaves.....	25		" Leaves.....	18				
" Pits.....	30		Summer Savory.....	25	30			
Pennyroyal.....	20		Sunflower Seed.....	40				
Peony Flowers.....	75		Sweet Clover.....	25				
" Root.....	50		Sweet Flag Root, Am.....	20	25			
Peppermint.....	20	25	Sweet Gale Burrs.....	60				
Pilewort.....	25		" " Herb.....	25				
Pine Bark, White.....	18		Sweet Gum Bark.....	50				
Pine Pitch, "	15		Tamarac Bark.....	18	20			
Pink Root.....			Tansy.....	18				
Plantain Leaves.....	20		Thimbleweed.....	25				
			Thistle Herb.....	25				
			" Root.....	30				

Extra charge of 6 cents per pound for Herbs in one, two or four ounce packages.  
Roots and Barks crushed or granulated, and pressed in one pound Packages only.

Complainant's Exhibit No 1. Dana H. Coolin,  
Special Examiner.

[165.]

DEPARTMENT OF THE INTERIOR,



UNITED STATES PATENT OFFICE.

J. Robinson  
No 32 Park St. Boston

To all Persons to whom these Presents shall come, Greeting:

This is to Certify that the annexed is a true copy from  
the Records of this Office of the Letters Patent  
granted Horace L. Bowker Dated  
July 24<sup>th</sup> 1877 #193,476  
for  
"Improvement in Syrups and Mineral  
Waters"

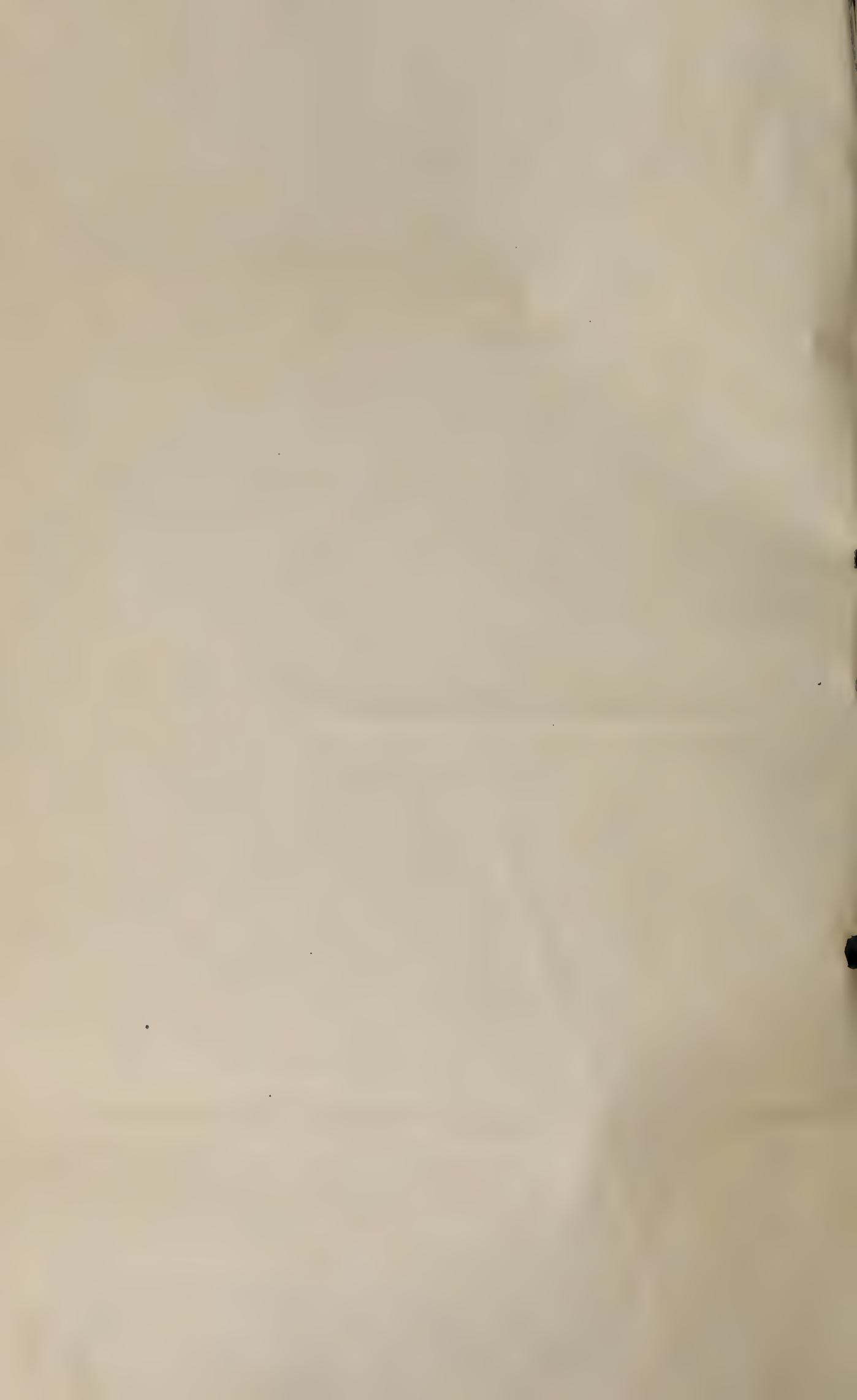
In testimony whereof, I,

*H. H. Doolittle*

ACTING COMMISSIONER OF PATENTS, have caused the SEAL of the  
PATENT OFFICE to be hereunto affixed this Ninth  
day of January, in the year of our Lord one  
thousand eight hundred and seventy-eight, and of the Inde-  
pendence of the United States the one hundred and second.

*M. Doolittle*

Acting Commissioner.





TO ALL TO WHOM THESE PRESENTS SHALL COME:

Whereas Horace L. Bowker

Boston, Massachusetts

has presented to the Commissioner of Patents a petition praying for the grant of LETTERS PATENT for an alleged new and useful

Improvement in  
Sieves and Mineral Dressing.

a description of which invention is contained in the Specification of which a copy is hereto annexed and made a part hereof, and has complied with the various requirements of Law in such cases made and provided; and

Whereas upon due examination made, the said Invention is adjudged to be justly entitled to a Patent under the Law;

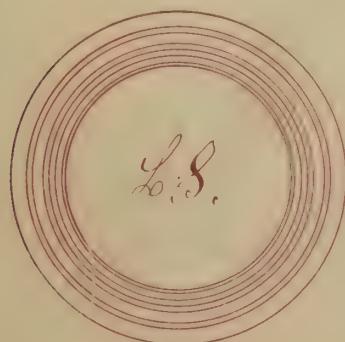
Now therefore these LETTERS PATENT are to grant unto the said

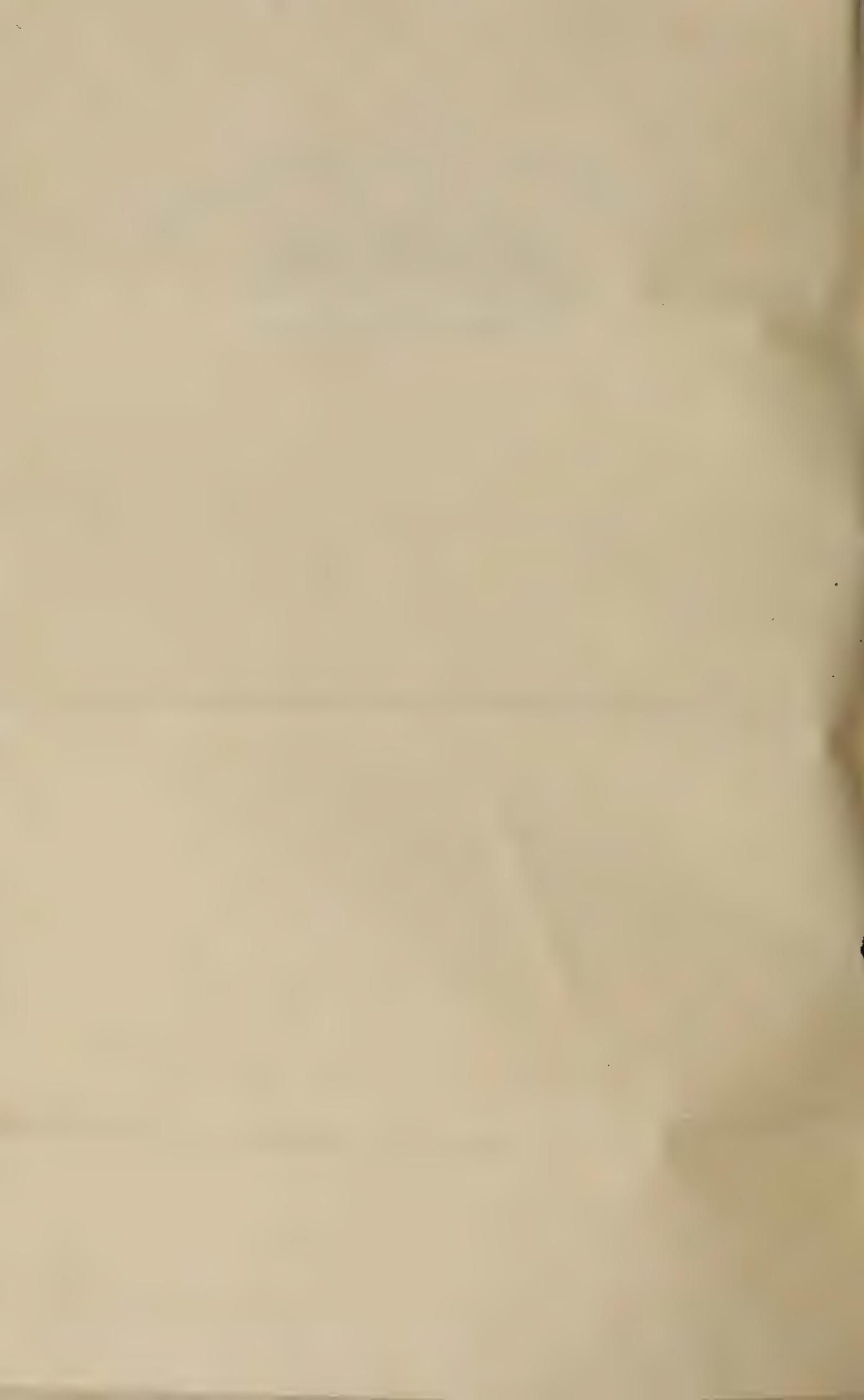
Horace L. Bowker his heirs or assigns for the term of seventeen years from the Twenty-fourth day of July, one thousand eight hundred and seventy-seven, the exclusive right to make, use, and vend, the said invention throughout the United States and the Territories thereof.

In testimony whereof I have hereunto set my hand and caused the seal of the Patent Office to be affixed at the City of Washington, this Twenty-fourth day of July, in the year of our Lord, one thousand eight hundred and seventy seven and of the Independence of the United States of America the One hundred

Countersigned:

A. G. Bell  
Ellis Spear, Acting Secretary of the Interior  
Commissioner of Patents.





# UNITED STATES PATENT OFFICE.

HORACE L. BOWKER, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN SIRUPS AND MINERAL WATERS, &c.

Specification forming part of Letters Patent No. 193,476, dated July 24, 1877; application filed July 7, 1877.

*To all whom it may concern:*

Be it known that I, HORACE L. BOWKER, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Sirups and Mineral Waters, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in sirups, mineral waters, ciders, beers, ales, or in any and all liquids containing carbonic-acid gas, whether natural or artificial, for the purpose of creating and sustaining a sparkling, frothy foam or head on the drink when drawn from the bottle or fountain, &c., or in whatever manner drawn; and this my invention consists in combining with sirups, mineral waters, or drinks, as aforesaid, a small quantity of saponin extracts produced from any vegetable matters containing saponin—such as, for instance, "soap-bark" from the *Quillaya saponaria* tree, the root and leaves of "soap-wort," (*Saponaria officinalis*), seneca or snake-root, and of the various species of smilax, or other vegetable products containing saponin, as aforesaid.

The saponin extract may be obtained from the vegetable products containing the same by soaking, steeping, or boiling such products in water, alcohol, ethers, or any other menstruum or process, by which the saponin properties are extracted. This liquid extract of saponin is or may be separated and prepared by any other convenient process, and is afterward filtered and strained, and is then ready to be mixed with the sirup, mineral waters, and aerated liquors, &c. This gum or liquid containing saponin, when mixed in small quantities with sirups, mineral waters, liquors, &c., as above-named, produces a very beautiful sparkling, frothy foam or head on the drink, and, what is still better, this foam remains on the drink for quite a long time, so that the carbonic-acid gas in the drink is prevented from escaping, and thereby retains the vivacity and invigorating properties of the drink a long time after it is drawn.

Where soda-water or ginger-ale is drawn, it fills the glass with a beautiful cream-like foam, which remains for a long time. It is also excellent in small-beer, for champagne-cider, and in all preparations where carbonic-acid gas exists, either fermented, charged, natural, or artificial.

This saponin gum is very pure and wholesome, will not hurt or spoil or make any liquid morbid or cloudy, whether used in large or small quantities. It has also the tendency to preserve beer and sirups from souring.

The advantage of the froth and foam produced by this mixture of saponin extract with the drinks, as aforesaid, is not merely to please the eye, but it tends to hold the carbonic-acid gas a long while in the liquid after it is drawn, which makes the drink taste more palatable and pleasant.

Where this saponin extract is used, the soda-water, ginger-ale, or whatever it is used in, need not be charged as high by 20° to produce the same effect, by which a great saving is made to parties who charge liquids or drinks with carbonic-acid gas. The chief merit of combining this saponin extract with sirups, mineral waters, &c., is that it prevents the carbonic-acid gas from escaping from the tumbler, and, as is well known, when soda-water, beers, &c., are drawn in an open tumbler, the gas escapes so rapidly that unless it is drunk instantly it is flat and worthless.

Having thus fully described my invention, I wish to secure by Letters Patent, and claim—

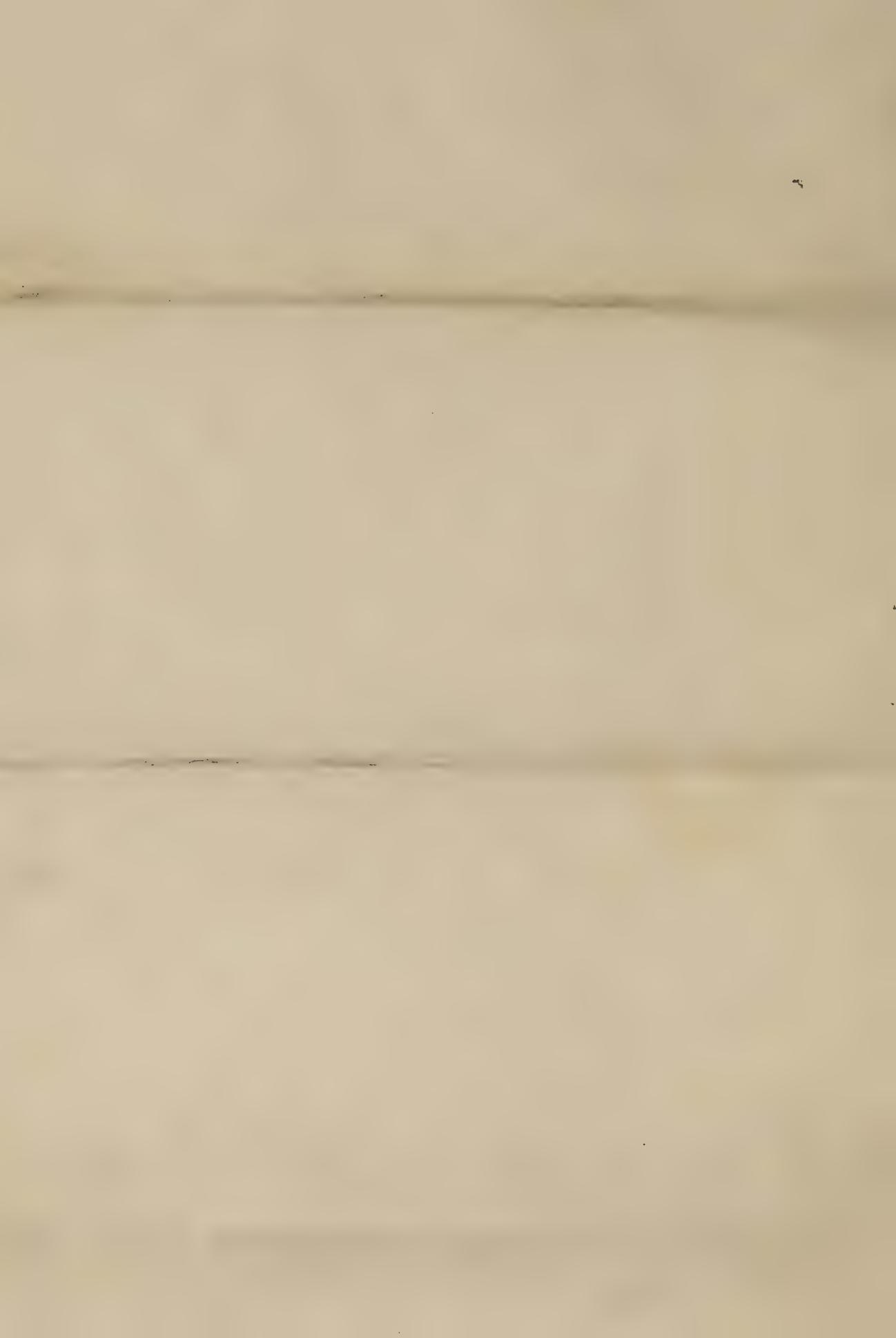
The combination of saponin extracted from vegetable products with sirups, mineral waters, ciders, beers, ales, &c., or other liquids containing carbonic-acid gas, whether natural or artificial, as and for the purpose herein set forth and described.

In testimony that I claim the foregoing as my own invention I have affixed my signature in presence of two witnesses.

HORACE L. BOWKER.

Witnesses:

ALBAN ANDRÉN,  
HENRY CHADBOURN.



Circuit Court of the United States.  
District of Massachusetts.

In Equity.

Horace L. Bowker }  
" }  
Gustavus D. Dows. }

### Replication.

The Plaintiff, saving and reserving to himself all and all manner of exception or otherwise to the manifold insufficiencies of the answer, for replication thereto, says he will aver and prove the bill to be true, certain and sufficient in the law to be answered unto; and that the defendant's answer is uncertain, untrue, and insufficient to be replied unto; without this, that any matter or thing in the answer material or effectual to be replied unto, confessed and avoided, traversed or denied, is true. All which this repliant is and will be ready to aver and prove as this honorable Court

shall direct, and humbly prays as in and by  
his bill, he has already prayed.

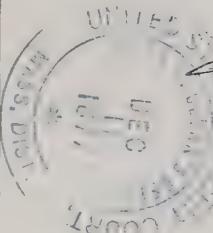
A. J. Robinson.

Solicitor for Plaintiff.



Horace L. Bowker  
of  
Democrats of New York

## Replication.



Service of a copy of  
the written Replication  
is hereby admitted,  
this eleventh day of  
December, A.D. 1877.

Yours truly,  
John Robinson,  
Solicitor for Plaintiff.

UNITED STATES OF AMERICA.

Massachusetts District, ss.

To  
Gustavus D. Dowd  
of Boston in our District of  
Massachusetts.

GREETING:

FOR CERTAIN CAUSES, offered before the Circuit Court of the United States of America, for the first Circuit, within and for the Massachusetts District, as a Court of Chancery, WE COMMAND AND STRICTLY ENJOIN YOU, laying all other matters aside, and notwithstanding any excuse, that you personally be and appear before our said Circuit Court at the Rules, to be holden at the Office of the Clerk of our said Court, in Boston, in said District, on the first Monday, being the ~~fifth~~  
day of November next, to answer to a Bill of Complaint exhibited against you in our said Court, wherein

Horace L. Bowler of said  
Boston

2

is Complainant and you are Defendant;

and to do further and receive that which our said Circuit Court shall consider in this behalf. And this you are in no wise to omit, under the pains and penalties of what may befall thereon.

Witness, the Honorable Morrison R. Waite — at Boston,  
this ~~one~~<sup>one</sup> hundred <sup>th</sup> day of October — A. D. 1877, in  
the ~~ninety~~ <sup>one</sup> hundred <sup>th</sup> year of the Independence of the United States of America.

Alex. H. Troubridge  
Deputy Clerk.

MEMORANDUM. The defendant is to enter his appearance in the suit in the Clerk's Office on or before the day at which the writ is returnable, otherwise the bill may be taken *pro confesso*.

919  
In Equity,

Horace L. Bowker

<sup>v.</sup>  
Gustavus D. Dowd

**SUBPOENA,**

RETURNABLE, Nov<sup>rd</sup> RULES,  
Nov<sup>rd</sup>, 1877.

Attorney.

A. J. Pendleton

United States  
} Marshall.

John C. Bowker

John C. Bowker

I hereby certify that I have served the within Subpoena by this 12th day of December 1877  
Massachusetts District, ss.  
United States of America, } 12th Dec 1877  
Massachusetts District, ss.  
1877

UNITED STATES OF AMERICA.

Massachusetts District, ss.

THE PRESIDENT OF THE UNITED STATES OF AMERICA,

To

Gustavus D. Dowd of Boston  
in said District -

Your Agents and Servants, GREETING.

WHEREAS

Horace L. Bowker of said  
Boston

ha **S** exhibited **his** Bill of Complaint before the Justices of our Circuit Court of the United States for the First Circuit, begun and holden at Boston, within and for the District of Massachusetts, on the **fourth** day of **May** A.D. 1878, against you the said

Gustavus D. Dowd

praying to be relieved touching the matters therein complained of, and whereas, by an Order from said Court, made on the **ninth** day of **October** A.D. 1878, it was ordered that a Writ of Injunction issue under the Seal of the said Court, to restrain you and each and every of you, from doing all the matters and things from the doing of which you are prayed to be restrained in said Bill, according in full with the prayer of said Bill.

WE therefore, in consideration thereof, ENJOIN AND COMMAND you each, and every of you that from and immediately after the receipt and notice of this our Writ, by you, or any of you, you shall not **make use or sell the combination of Saponin extracted from vegetable products with syrups, mineral waters, ciders, beers, ales, &c or other liquids containing carbonic acid gas whether natural or artificial, described and claimed in Letters Patent of the United States No 193476 granted said Bowker July 24, 1877 for Improvement in Syrups and Mineral Waters**

WHEREOF you are not to fail on pain of ten thousand dollars, to be levied on your and each of your goods, chattels, lands and tenements, to our use.

Witness the Honorable **Horatio K. Waite**, at Boston, this **first** day of **November** in the year of our Lord one thousand eight hundred and seventy **eight**

**John Stetson Clerk.**

119 *Thaumatochela* (Dumortier) *longipinnis* (Dumortier)

IN EQUITY,

versus

John T. Sims

## WRIT OF INJUNCTION.

Aug. 1, 1843

## Massachusetts District, ss.

187

Circuit Court of the United States  
District of Massachusetts

In Equity

The answer of Gustavus D. Dows to the Bill  
of Complaint of Horace L. Bowker.

The defendant now and at all times  
hereafter saving and reserving to himself,  
according to the approved formula in that  
regard, every benefit of exception to the bill  
aforesaid, for answer unto so much thereof  
as he is advised it is material that he  
should make answer unto, answering says:

I.- He admits, upon information and belief,  
the grant of the Letters Patent to the Complain-  
ant as alleged in said bill; but requires their  
production at the hearing and when the  
proofs are taken.

II.- He denies that the complainant was  
the original and first inventor of the im-  
provement set forth and claimed in said  
Letters Patent. And he avers, upon informa-  
tion and belief, that previous to the alleged  
invention of said improvement by the com-  
plainant, it was known to the persons whose  
names and residences are first set forth  
in the following list, as having been used



by those whose names respectively are set opposite the names of those having such knowledge, and at the places over against their respective names, to wit:

Witnesses	Residence	Users	where
D. H. Vincent	Boston	Vincent, Hathaway & Co.	Boston
Levi S. Hathaway	"	" " "	"
Moses Fairbanks	"	Moses Fairbanks & Co	"
J. Bartlett Patten	"	J. Bartlett Patten	"
Joseph S. Brown	"	Joseph S. Brown	"
A. G. Wilbur	"	A. G. Wilbur	"
Frank B. Dole	"	Dole Brothers	"
W <sup>m</sup> A. Guild	South Boston	W <sup>m</sup> A. Guild	South Boston
Charles S. Gove	Cambridgeport	Comstock, Gove & Co.	Boston
Hiram M. Comstock	"	" " "	"
Daniel Sands	Dorchester	" " "	"
Levi Fairbanks	Cambridge	Moses Fairbanks & Co.	"
Oliv S. Neale	"	" " "	"
James W. Tufts	Medford	James W. Tufts	"
J. D. Burbank	Charlestown	J. D. Burbank	"
Charles S. Copeland	Stoneham	Charles Copeland & Son	"
John K. Southmayd	Malden	John K. Southmayd	"
C. I. Hood	Lowell	C. I. Hood & Co	Lowell
C. M. Ballard	Worcester	C. M. Ballard	Worcester
Albert Aiken	E. Somerville	Albert Aiken	E. Somerville
S. B. Winn	Salem	S. B. Winn	Salem
C. J. Clapp	Foxborough	C. J. Clapp	Foxborough
Oliver Johnson	Providence	Oliver Johnson	Providence



Hedgman	New York City,	Hedgman	New York
E. R. Durkee	" "	E. R. Durkee & Co.	" City
Hundt	" "	Hundt	" "
Benj W. Dyer	" "	Benj W. Dyer	" "
Frederick Brown	Philadelphia	Frederick Brown	Philadelphia
Wm B. Burke	"	Wm B. Burke & Co.	"
G. W. Carpenter	"	G. W. Carpenter	"
James Bailey	Baltimore	James Bailey	Baltimore
Henry A. Elliott	"	Henry A. Elliott	"
John B. H. Jefferson	"	John B. H. Jefferson	"
John W. Drew	Washington	John W. Drew	Washington
Henry Sweet	Chicago	Henry Sweet	Chicago
H. A. Hurlbut	"	H. A. Hurlbut	"
J. S. Merrill	St. Louis	J. S. Merrill	St. Louis

III.- And this defendant, further answering avers, upon information and belief, that Letters Patent for a mode of "Saturating and super-saturating with carbonic acid" which embraces the mode set forth and described in the complainants said patent, was granted in England to William Francis Hamilton, dated May 4<sup>th</sup> 1809, and enrolled November 2<sup>d</sup> 1809.

IV.- This defendant avers and charges, that the description and specification of the complainant alleged and pretended invention contained in his said patent does not describe the same in such full, clear, and exact terms, as to enable any



person skilled in the art to which it appertains or with which it is most nearly connected, to make, compound, and use the said invention, without the aid of repeated experiments and discovery; and that the complainant, well knowing the defectiveness of said description and specification, and that they contained less than the whole truth relative to the said invention, did, as this defendant is advised and believes, file the same in the patent office for the purpose of deceiving the public; and that the public, moreover, have been deceived and misled thereby.

IV.- This defendant, further answering says he does not know and is not informed, save in and by said bill of complaint against him, whether said complainant has invested and expended large sums of money, and has been to great trouble in and about said alleged invention, and for the purpose of carrying on the business and manufacturing and selling the same, and making the same profitable to himself and the public; and this defendant denies the allegations to that effect in said bill of complaint, and leaves the complainant to make such proof thereof as he may be advised is expedient and useful.

V.- This defendant denies, upon knowledge, information and belief, that said alleged invention



has been and is of great benefit and advantage to the public and to said complainant; and that the public have very largely or to any great extent, acknowledged and acquiesced in his alleged rights and claims.

VII.- This defendant avers that he has no knowledge or information sufficient to form a belief as to whether the anticipation of the complainant set forth in his said bill, respecting the gains and profits which he may receive under his said Letters Patent, if the alleged infringement thereof is prevented will or will not be realized; and he leaves said complainant to make such proof thereof as he may be advised is material.

VIII.- This defendant denies that he has ever contrived or is now contriving to injure the complainant and to deprive him of the benefits and advantages which would rightfully accrue unto him from said alleged invention; and denies that he has ever infringed or is now infringing the complainant's said Letters Patent, and that he ever threatened or now threatens so to do; and denies that he has ever been guilty of any act or avowal whatsoever which would have the effect to encourage or induce such infringement on the part of others.

IX.- He admits the receipt by him of notice of the infringement with which he stands charged in said bill of complaint.



¶ He denies all and all manner of unlawful combination and confederacy wherewith he is by the said bill charged; and denies each and every other allegation in the said bill contained, not hereinbefore admitted controverted or denied; without this that there is any other matter, cause or thing in the said complainants' bill of complaint contained, material or necessary for this defendant to make answer unto, and not herein and hereby well and sufficiently answered, confessed, traversed and avoided or denied, is true, to the knowledge or belief of this defendant; all which matters and things this defendant is ready and willing to aver, maintain and prove, as this Honorable Court shall direct; and humbly prays to be hence dismissed with his reasonable costs and charges in this behalf most wrongfully sustained.

Gustavus D. Dowes

United States of America {  
District of Massachusetts }  
se

On this eleventh day of December, 1877, before me came Gustavus D. Dowes who being by me duly sworn, says; that he is the defendant herein; that he has read the foregoing answer subscribed by him, and knows the contents thereof; and that <sup>the</sup> same is true of his own knowledge, except as to matters stated on information and belief, and as to those matters he believes it to be true.

Subscribed and — | Gustavus D. Dowes

Sworn to before me, this eleventh

Second day of December, 1877

at the office of Boston. G. D. Dowes Public

Horace L. Bowker

409

Gustave D. Stoe

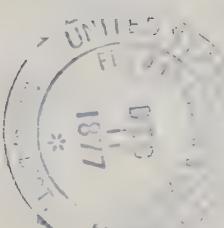
v.

Respondent

Answer

Service of a copy of the within  
answer is fully admitted  
this eleventh day of  
December A.D. 1877

A. J. Robinson  
Collector for U.S.



Circuit Court of the United States,  
District of Massachusetts.

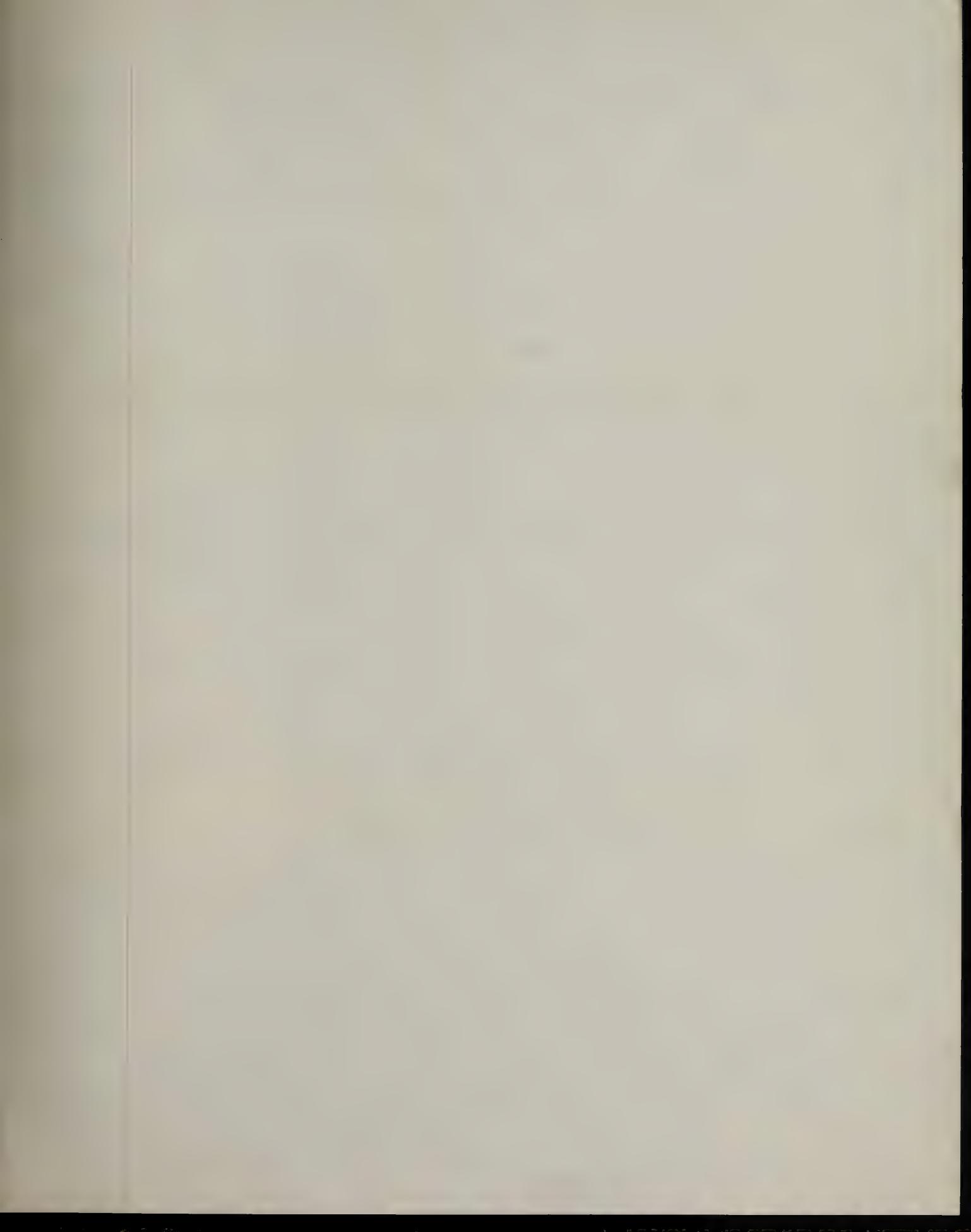
Frank B. Fowler }  
John W. Howes }  
In Equity.

It is hereby stipulated and agreed that David  
C. Woodbridge, Esq., of Boston, may, on appointment by  
the Court, serve as special Examiner under and  
in accordance with the 67<sup>th</sup> rule in equity, for  
the taking of evidence in the above entitled  
cause.

A. J. Robinson, Complainant's Solicitor.

Dana B. Gove Esq., Solicitor  
Boston, Feb. 12<sup>th</sup> 1877.





Grace L. Powell

William D. Powell

Delighted to see

you to

Special Examiner.

Howard Smith Jr.



A. J. Hollingshead  
Convolvulus is Grecian  
Kara D. Gurni

United States Circuit Court,  
District of Massachusetts.

Horace L. Bowker }  
" } ... In Equity.  
Gustavus D. Dow.

Consent is hereby given, that the answer  
in the above entitled cause may be filed and  
a copy thereof served on the complainant, at  
any time previous to December 15<sup>th</sup>, 1877, with the  
same effect as if done in accordance with the  
rule of Court relating thereto.

A. J. Robinson, Solicitor for Complainant.

November 1, 1877.

Dana B. Gove  
Solicitor for Defendant

Horace & Sonnen

v

Quelans D. Dowd.

Stipulation.

Bill of Complaint  
In the  
Circuit Court of the United States.

In Equity  
where

To the Honorable the Judges of the Circuit Court of the United States, for the District of Massachusetts.

Horace L. Bowker, of Boston,  
in the County of Suffolk and  
Commonwealth of Massachusetts,  
brings this Bill of Complaint  
against  
Gulavus D. Dow,  
of said Boston.

And thereupon your orator complains and says: That he is informed and believes himself to be the original and first inventor of a new and useful improvement in syrups and mineral water, &cetera, fully described in the Letters Patent hereinafter mentioned, and which had not been known and used before his said invention, and which at the time of his application for a patent, as hereinafter mentioned, had not been for more than two years in public use or on sale with his consent or allowance.

And your orator, on information and belief further shows unto your Honors, that the said

Bowker, being es, as aforesaid, the first inventor and discoverer of said improvement and being also a citizen of the United States, did on the 24<sup>th</sup> day of July 1877, upon due application therefor, obtain Letters Patent of the United States for said invention, in due form of law, under the seal of the Patent Office of the United States, signed by the Secretary of the Interior, and countersigned by the Commissioner of Patents of the United States, bearing date the day and year last aforesaid, whereby there was granted and secured to the said Bowker, his heirs, administrators, and assigns, or intended so to be, for the term of seventeen years from and after the date of the said Letters Patent, the full and exclusive right to make, use and vend to others to use the said invention and improvement, as set forth in said Letters Patent, which are now remaining on record in the Patent Office of the United States; and by virtue whereof the said Bowker became and was, the sole owner of the rights and privileges granted and secured in and by said Letters Patent.

And your orator further shows unto your Honors that your orator by virtue of the premises became and now is the exclusive owner of the said Letters Patent, and of the invention, and of the rights and privileges granted and secured, or intended to be granted and secured, thereto; and that he has invested large sums of money, and has been to great trouble, in and about said invention, and for the purpose of carrying on the

business, and manufacturing and selling the same, and making the same profitable to himself and the public; and that said invention has been, and is, of great benefit and advantage to the public and to your orator; and that the public have very largely acknowledged and acquiesced in the aforesaid right of your orator; and your orator believes that he will receive and realize large gains and profits therefrom, if infringements thereof by the said defendant shall be prevented.

If the said defendant, well knowing the premises and the rights secured to your orator aforesaid, but continuing to injure your orator and deprive him of the advantages, which might, and otherwise would, accrue unto him from said invention, after the issue of the said Letters Patent to your orator and before the commencement of this suit, did, as your orator is informed and believes, without the license or allowance, and against the will of your orator, and in violation of his rights, and infringement of the said Letters Patent, unlawfully and wrongfully, and in defiance of the rights of your orator did make, use, and sell the said invention and improvement, and that he still continues to do so; that he is threatening to make, use and sell the same in large quantities, and to supply the market therewith, all in defiance of the rights acquired by and secured to, your orator, as aforesaid, and to his great and irreparable loss and injury, and by which he has been and is still being de-

privied of great gains, and profits, which he might, and otherwise would, have obtained and which have been enjoyed, and are being received and enjoyed by the said defendant, by and through his aforesaid unlawful acts and doings.

And your orator further shows unto your Honors, on information and belief that said defendant has largely made, used, and sold the said invention and improvement, and has on hand in large quantity a certain preparation, containing said invention, which he is offering for sale, and has made and realized large profits and advantages therefrom; but, to what extent and how exactly your orator does not know, and prays a discovery thereof.

And your orator says that the using of said invention by the said defendant and his preparation therefor and avowed determination to continue the same, and his other aforesaid unlawful acts, in disregard and defiance of the rights of your orator have the effect to encourage and induce others to venture to infringe said patent in disregard of your orator's rights theremunder.

And your orator further shows unto your Honors, that he has caused notice to be given unto said defendant of said infringements, and of the rights of your orator in the premises, and requested him to desist and refrain from such infringements; but he has disregarded the said notice, and refused to desist from such in-

ingements, and still persists and continues  
therem

And your orator prays that the said defendant, his servants, agents, attorneys, and workmen, and each and every of them, may be restrained and enjoined by the order and injunction of this Honorable Court from directly or indirectly, making, using or vending said invention and improvement, or his aforesaid preparation or any preparation containing the same or the substantial equivalent thereof, against the said rights of your orator, and that the said defendant may be decreed to pay the costs of this suit; and that your orator may have such further relief, or such other relief as to the Honorable Court shall seem meet, and as shall be agreeable to equity.

May it please your Honors to grant unto your orator the writ of injunction issuing out of this Honorable Court, commanding, enjoining, and restraining the said defendant, and his servants, agents, attorneys, and workmen, and each and every of them, as hereinbefore in that behalf prayed.

And forasmuch as your orator can have no adequate relief except in this court, to the end therefore, that the said defendant may, if he can, show why your orator should not have the relief hereby prayed, and may upon his corporal oath, and according to his best and utmost knowledge, remembrance, information, and belief, full, true, direct and perfect answers make to

the premises, and to all the several matters hereinbefore stated and charged, as fully and particularly as if severally and separately interrogated as to each and every of said matters, and may be compelled to account for, and pay to your orator the profits by him acquired and the damages suffered by your orator from the aforesaid unlawful acts; and that the court may assess said profits and damages, and may increase the damages to a sum not exceeding three times the amount thereof: May it please your Honor to grant unto your orator the writ of Subpoena issuing out of, and under the seal of this Honorable Court, directed to the said defendant, commanding him by a certain day, and under a certain penalty, to be and appear in this Honorable Court, then and there to answer the premises, and to stand to, and abide such order and decree as may be made against him.

And your orator will ever pray to.

Horace L. Bowker.

Alphonse J. Robinson,  
Complainant's Solicitor.

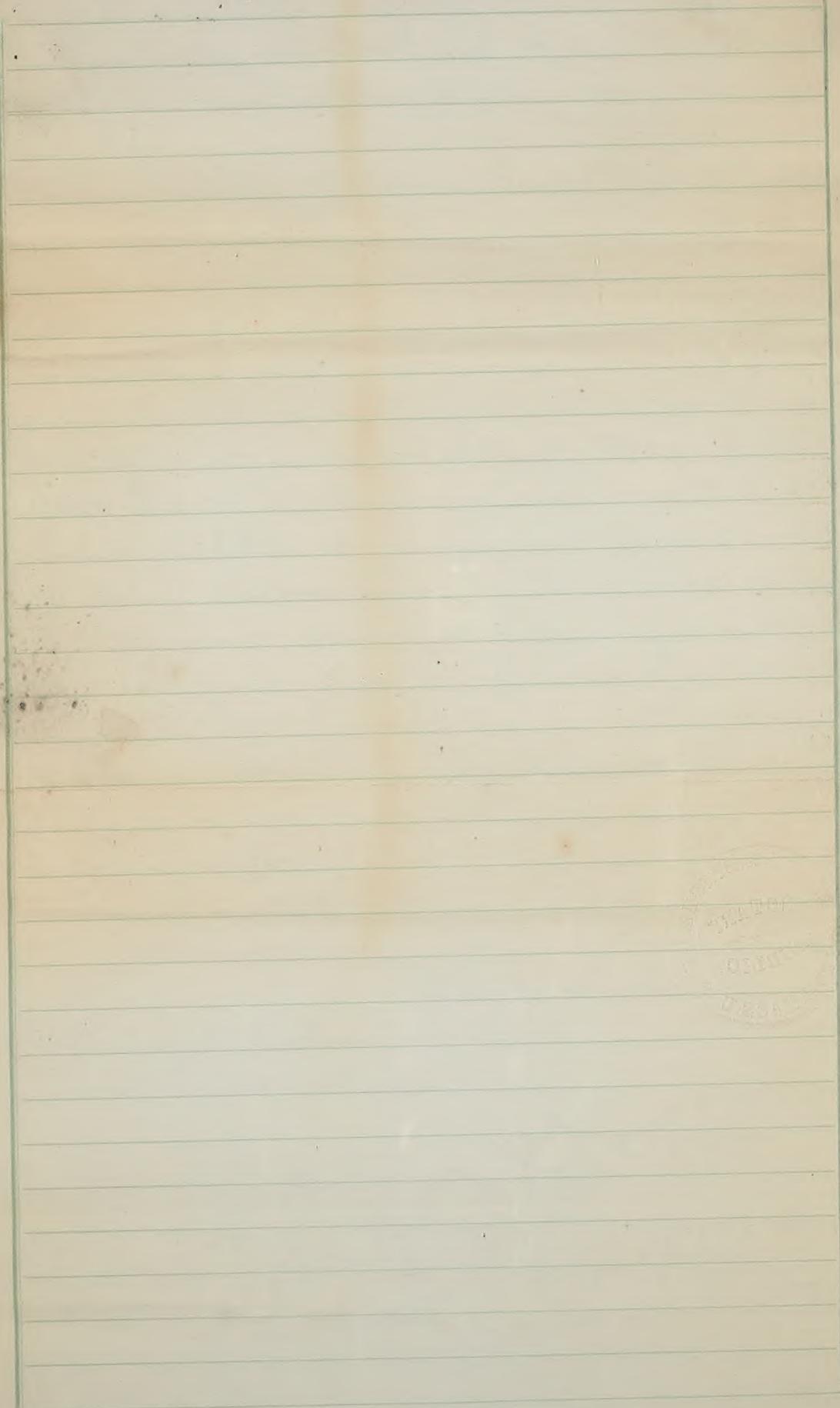
United States of America }

District of Massachusetts, } ss.

On this first day of October,  
A.D. 1877, before me personally appeared Horace L. Bowker, who being by me duly sworn, deposes and says that he is the above named com-

plaintiff; that he has read the foregoing Bill of complaint, subscribed by him, and knows the contents thereof and that the same is true of his own knowledge, except as to matters therein stated on information and belief, and to these he believes it to be true.

Henry R. Bigelow,  
Notary Public.





Horace L. Bowker

N

Gustavus D. Dow

Recorded  
C.C.

Oil in Equity

Rec'd. by mail



Subpoena dicitur to R.  
to meet, Nov. 5, 1877

J. J. Robinson  
Complainant - Solicitor